

WE CLAIM

- Claim 1. A method for screening for an agent useful in treating a fungal infection, comprising contacting a fungal sample with a compound to be tested for antifungal activity and determining activity of a Csh3p a Csh3p analog, a nucleic acid molecule encoding Csh3p or a nucleic acid molecule encoding a Csh3p analog, as a determination of usefulness of said agent in treating said fungal infection.
- Claim 2. The method of claim 1, wherein said fungal infection is a yeast infection.
- Claim 3. The method of claim 1, wherein said fungal infection is a Candida infection.
- Claim 4. The method of claim 3, wherein said Candida infection is a C.albicans infection.
- Claim 5. The method of claim 1, wherein activity of Csh3p or Csh3p analog is virulence.
- Claim 6. The method of claim 1, wherein activity of Csh3p or Csh3p analog is hyphal formation.
- Claim 7. The method of claim 1, wherein said activity is amino acid uptake by fungi in said fungal sample.
- Claim 8. The method of claim 1, wherein said fungal sample is a sample of fungal cells alleles of which are heterozygous for said Csh3p or Csh3p analog.
- Claim 9. The method of claim 1, wherein said fungal sample is a sample of fungal cells which are homozygous recessive for said Csh3p or Csh3p analog.
- Claim 10. The method of claim 1, wherein said fungal infection is a Schizosaccharomyces infection, an Aspergillus infection, a Botyrotinia infection, or a Neurospora infection.
- Claim 11. The method of claim 1, wherein said infection is a human infection.

- Claim 12. The method of claim 1, wherein said infection is an infestation of an agricultural crop.
- Claim 13. A method for determining potential pathogenicity of a fungus, comprising culturing a sample of said fungus in the presence of an amino acid which is found in an environment in which said fungus is found, and determining uptake of said amino acid by said fungus as a determination of potential pathogenicity of said fungus.
- Claim 14. A method for determining if a compound is an inhibitor of a fungus, comprising contacting said compound to said fungus in the presence of an amino acid taken up via a specific mechanism by said fungus, with a resulting pleiotropic effect and determining if said compound effects said amino acid uptake or pleiotropic effect as a determination of a possible fungal inhibitor.